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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,300	03/26/2004	Shiraz M. Shivji	080803.P001	9298

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HEIMLICH LAW  
5952 DIAL WAY  
SAN JOSE, CA 95129

EXAMINER
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NADKARNI, SARVESH J

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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08/25/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

alanheimlich@heimlichlaw.com  
sroberts@peloquinlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,300	<b>Applicant(s)</b> SHIVJI, SHIRAZ M.	
	<b>Examiner</b> SARVESH J. NADKARNI	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-9, 16-29, 31-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-15, 30, 36, 37-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Election/Restrictions**

- 1. Claims 1-9,16-28,31-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 5/16/08.**
- 2. Applicant's election without traverse of species IV in the reply filed on 5/16/08 is acknowledged.**

**This Office Action is in response to the Response to Election/Restriction correspondence filed May 16, 2008, Application Number: 10/810,300 (hereinafter referred to as "application"). The application was published on March 10, 2005, Publication Number: US 2005/00523676 A1. Page and line number references made in this action relate to the originally filed application, not the publication. Receipt is acknowledged of the information disclosure statements filed on March 26, 2004 and October 17, 2005.**

**Applicant has elected Species IV and the corresponding claims 10-15, 30, 36, 37-40, and has added claims 3 and 29 to said species election. Applicant has cancelled all other claims without prejudice. In the previous correspondence, however, claim 3 was cancelled. Additionally, claim 3 and 29 do not correspond with the distinguishing characteristics of Species IV and therefore, neither claim will be addressed in this Action.**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 30, 36, 37, and dependent claims 11, 12, 13, 14, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Lin” (US 6452,575 B1) further in view of Ohta et al., (US 5,444,456) hereinafter referred to as “Ohta”.

3. With regard to claim 10, Lin discloses **an apparatus comprising: a linear movement stage for producing linear movement** (see at least column 2, lines 40-61 describing elements 3-20 the device producing linear movement, see at least column 1, lines 45-50 describing linear movement further illustrated at least in FIG. 4 and 6); **a substrate mounted to said linear movement stage** (see at least column 1, lines 42-53 describing planar reciprocating body 2 further illustrated in FIG. 4); **an array of light emitting devices (LEDs) attached to said substrate** (see at least FIG. 4 element 1 further described at least at column 1, lines 45-53 and additionally at column 2, lines 40-45) but does not explicitly teach the LEDs are **capable of light emission substantially perpendicular to said linear movement; a controller attached to said substrate** .

4. In the same field of endeavor, Ohta clearly teaches the LEDs are **capable of light emission substantially perpendicular to said linear movement** (see at least FIG. 15 further described at least at column 1, lines 30-35 and additionally see FIG 7)

**and a controller attached to said substrate** (see FIG. 9 further described at least at column 5, lines 3-17 describing computing unit 27 further described as control means coupled to the device in claim 1 at column 6, lines 58 through column 7 lines 13).

5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the perpendicular light emission and controller attached to the substrate as taught by Ohta into the device of Lin because both are within the same field of endeavor, and furthermore, because Ohta improves the durability of the device by providing additional protection to the light emitting elements (see Ohta at least at column 2, lines 30-45).

6. With regard to claim 30, Lin in view of Ohta clearly teaches **a system for displaying an image** (see Lin at least at Abstract describing system for displaying image further generally illustrated at least in FIG. 4 and described at least at column 2, lines 40-61) **comprising: means for receiving a display signal** (see Ohta at least at claim 1 column 7, lines 1-3 describing memory means further described as a memory unit element 27 and illustrated in FIG. 9 further described at column 5, lines 3-17); **means for positioning an array of light emitting devices (LEDs)** (see Lin at least at column 2, lines 40-61 further illustrated in FIG. 4, elements 3-20); **means for determining a precise location of said array of LEDs** (see Ohta at least at column 5, lines 3-17 describing sensor switch element 24 further illustrated in FIG. 9; furthermore, see Lin at least at column 4, lines 3-15 further illustrated in FIG. 4 for position determination); **means for energizing one or more LEDs of said array of LEDs based upon said display signals** (see Lin at least at column 4, lines 3-15 describing

operation and energizing of lights based on display signal; furthermore see Ohta at least at FIG. 15 and further described at least at column 1, lines 24-35); **and means for optically conveying light from said energized one or more LEDs** (see Ohta at least at FIGs. 2-5 illustrating means for optically conveying further described at least at column 4, lines 33-51).

7. With regard to claim 36 Lin in view of Ohta clearly teaches **a method for producing an MxN display** (see Lin at least at FIGs. 1, 4, and 6 further described at least at column 1, lines 42-53 and column 2, lines 19-30 and continued at least at lines 40-61) , **the method comprising: receiving a video input display signal** (see Ohta at least at claim 1 column 7, lines 1-3 describing memory means further described as a memory unit element 27 and illustrated in FIG. 9 further described at column 5, lines 3-17); **moving a row of substantially linearly spaced M elements capable of light production to N positions )** (see Lin at least at column 2, lines 40-61 further illustrated in FIG. 4, elements 3-20); **and energizing one or more of said M elements to produce said light production at one or more of said N positions based upon said received video signal** (see Lin at least at column 4, lines 3-15 describing operation and energizing of lights based on display signal; furthermore see Ohta at least at FIG. 15 and further described at least at column 1, lines 24-35).

8. With regard to claim 37, Lin in view of Ohta clearly teaches **a method for producing an MxN display** (see Lin at least at FIGs. 1, 4, and 6 further described at least at column 1, lines 42-53 and column 2, lines 19-30 and continued at least at lines 40-61), **the method comprising: receiving a video signal** (see Ohta at least at claim

1 column 7, lines 1-3 describing memory means further described as a memory unit element 27 and illustrated in FIG. 9 further described at column 5, lines 3-17); **moving M elements capable of light production to N positions** (see Lin at least at column 2, lines 40-61 further illustrated in FIG. 4, elements 3-20); **and energizing one or more of said M elements to produce said light production at one or more of said N positions based upon said received video signal** (see Lin at least at column 4, lines 3-15 describing operation and energizing of lights based on display signal; furthermore see Ohta at least at FIG. 15 and further described at least at column 1, lines 24-35).

9. With regard to claim 11, Lin in view of Ohta clearly teaches **the apparatus of claim 10** (see above) **wherein said linear movement stage is capable of movement in one or more directions** (see Lin at least at FIG. 6 as indicated by arrows further described at least at column 1 lines 45-50 describing up and down movement).

10. With regard to claim 12, Lin in view of Ohta clearly teaches **the apparatus of claim 10** (see above) **wherein said linear movement stage is capable of movement back and forth** (see Lin at least at FIG. 6 as indicated by arrows further described at least at column 1 lines 45-50 describing up and down movement).

11. With regard to claim 13, Lin in view of Ohta clearly teaches **the apparatus of claim 10** (see above) **wherein said controller is coupled to control illumination of zero or more LEDs of said array of LEDs** (see at least claim 1 of Ohta at column 6, lines 55-end and continued at column 7 lines 1-10 describing relation of control means with LEDs).

12. With regard to claim 14, Lin in view of Ohta clearly teaches **discloses the apparatus of claim 13** (see above) **wherein said controller is coupled to control positioning of said linear movement stage** (see Lin at least at FIGs. 4 and 5 further described at least at column 4, lines 6-15 describing the positioning device and its associated control circuit).

13. With regard to claim 38, Lin in view of Ohta clearly teaches **the method of claim 37** (see above) **wherein said moving further comprises moving at substantially a non-constant velocity** (see Lin, generally and also specifically at least at column 1, lines 42-53 further described at least at column 2, lines 40-61 describing revolutions) It would be obvious to one of ordinary skill in the art that a non-constant velocity would be achieved because display device will decelerate to at least a temporary stop at both ends of a revolution cycle).

14. With regard to claim 39, Lin in view of Ohta clearly teaches **the method of claim 37** (see above) **wherein said energizing further comprises energizing at substantially a non-constant time interval** (see Ohta at least at column 5, lines 3-67).

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Ohta as applied to claim 10 above, and further in view of Wang, (US 6,348,905 B1) hereinafter referred to as "Wang".

16. With regard to claim 15, Lin in view of Ohta clearly teaches **the apparatus of claim 10** (see above) but does not explicitly disclose **wherein said linear movement stage further comprises one or more substantially parallel rails**.



17. In the same field of endeavor, Wang clearly teaches **wherein said linear movement stage further comprises one or more substantially parallel rails** (see at least column 3, lines 1-15 describing upper and lower frame parts and further illustrated at least at FIG. 1).

18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate moveable display device as taught by Lin in view of Ohta into the framed moveable display device of Wang because all are within the same field of endeavor (as is evidenced by the same classification, sub-classification and field of search), and furthermore, because Wang improves the device by providing the obvious benefit of a more robust design through a support means and rail mechanism to improve stability and viewability of the display device while minimizing the required number of LEDs (see Wang at least at column 1, lines 19-32).

19. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin in view of Ohta as applied to claim 37 above, and further in view of Nobile (US 5,057,827) hereinafter referred to as "Nobile".

20. With regard to claim 40, Lin in view of Ohta clearly **teaches the method of claim 37** (see above) but does not explicitly teach **said moving further comprises moving in a substantially non-linear direction.**

21. In the same field of endeavor, Nobile clearly teaches **said moving further comprises moving in a substantially non-linear direction** (see at least Nobile at column 4, lines 8-30 describing a nonlinear circular path).

22. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to modify the display device as taught by Lin in view of Ohta into the non-linear moving display device of Nobile because all are within the same field of endeavor, and furthermore, because Nobile improves visibility by producing a display along a 360 degree path (see Nobile at least at column 2, lines 5-18 describing viewability).

### ***Response to Arguments***

23. Applicant's arguments with respect to claim 10-15, 30, and 36, 37-40 have been considered but are moot in view of the new grounds of rejection.

### ***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARVESH J. NADKARNI whose telephone number is (571)270-1541. The examiner can normally be reached on 11AM-7PM EST Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sarvesh J. Nadkarni  
Examiner – Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629